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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/665,378

09/22/2003

Makoto Shimizu

492322013700

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08/05/2005

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EXAMINER

DAVIS, OCTAVIA L

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/665,378

Applicant(s)

SHIMIZU ET AL.

Examiner

Octavia Davis

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 5/19/05.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 and 11-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/22/03 (1-9B), 5/19/05 (10A-10C) is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Suga.

Regarding claim 6, Suga discloses a fingerprint detection apparatus comprising an insulating substrate 101, unit detection elements 103 disposed on the insulating substrate in a matrix form, a flexible conductive film 102 facing the unit detection elements, drain wires 113 connected to corresponding terminals of the unit detection elements, gate wires 114 connected to corresponding terminals of the unit detection elements, a horizontal scanning circuit 116 selecting the drain wires sequentially, a vertical scanning circuit 115 sending a scanning signal to the gate wires sequentially, a sensor control circuit 104 including a detection circuit 112 connected to the horizontal scanning circuit 116 and the vertical scanning circuit 115 and a sensor actuation signal wire (See Fig. 7) connected to the sensor control circuit, wherein the sensor control circuit is configured to receive a sensor actuation signal through the sensor actuation signal wire and configured to switch off the unit detection elements 103 operational under the operation mode and to switch on the unit detection elements not operational under the standby mode in response to the sensor actuation signal (See Col. 9, lines 1 – 25 and Col. 10, lines 11 – 35, See Figs. 6 and 7).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suga in view of Knapp (5,325,442).

Regarding claim 7, Suga discloses all of the limitations of these claims except for a teaching that a sensor area surrounds the unit detection elements, portions of the drain and gate wires and the switch. However, Knapp discloses a fingerprint sensing device and a recognition system comprising a sensor area 10 that includes detection elements 12, drain and gate wires (See Col. 5, lines 61 – 65, Fig. 2) and a switching device 16 (See Col. 5, lines 45 – 60, Fig. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Suga according to the teachings of Knapp for the purpose of, Utilizing an active matrix addressed sensing pad that produces large area active matrix arrays (See Knapp, Cols. 5 and 6, lines 66 – 68 and 1- 5).

Regarding claim 8, in Suga, switching device 117 provides the actuation signal (See Fig. 7).

Regarding claim 9, in Suga, the switches 110, 111 are disposed between the detection elements 103 and is connected to the sensor actuation signal wire.

Regarding claim 10, in Suga, one of the unit detection elements 103 is configured to serve as the switch under the standby mode (See Col. 10, lines 40 – 54 and 60 – 65).

### ***Conclusion***

#### ***Response to Arguments***

5. Applicant's arguments filed 5/19/05 have been fully considered but they are not persuasive. In response to applicant's arguments that the references do not disclose *a sensor control circuit, the sensor control circuit being connected to the horizontal and vertical scanners and the sensor control circuit switching the unit detection elements on and off*, it is the examiner's position that in Suga, the control circuit 104 includes the detection circuit 112 and is connected to the horizontal scanner 116 and vertical scanner 115 (See Figs. 6 and 7, See Col. 10, lines 11 – 23), the detection circuit includes switching transistors 117 for performing a resetting operation to set the transistor to a conducting state upon receiving a reset signal (See Col. 10, lines 34 – 49), wherein first and second transistors 110, 111, of the control circuit 104, switch connections between the scanning control circuits 115, 116 and the unit detection elements 103 under the control of the scanning circuits (See Col. 19, lines 19 – 24), thus the references still stand.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2855

6. Any inquiry concerning this communication should be directed to examiner Octavia Davis at telephone number (571) 272 - 2176. The examiner can normally be reached on Monday - Thursdays (9:00 - 5:00), Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz, can be reached on (571) 272 - 2180. The fax phone number for the organization where this application where this application or proceeding is assigned is (703) 872 - 9306.



OD/2855

7/26/05



**MAX NOORI**  
**PRIMARY EXAMINER**